

IN THE CLAIMS

1. A pedicle screw assembly comprising:

a screw having a head with a convex portion;

5 a receiver receiving the head and an elongated member; and

the receiver having a concave portion, the concave portion having a radius of curvature which is less than a radius of curvature of the convex portion of the head whereby to create an interference fit between the convex portion of the head and the concave portion of the receiver.

2. A pedicle screw assembly according to claim 1 and further comprising a nut on the receiver which compresses the convex portion of the head into the concave portion of the receiver.

3. A pedicle screw assembly according to claim 2 wherein the receiver comprises a U-shaped portion for receiving the elongated member.

4. A pedicle screw assembly according to claim 2 wherein the concave portion of the receiver is formed of titanium.

5. A pedicle screw assembly according to claim 1 wherein each of the concave portion and convex portion have a spherical shape.

6. A pedicle screw assembly according to claim 1 wherein the screw comprises an elongated shank having bone threads thereon and the head located at one end thereof;

wherein the receiver comprises a body having an aperture therethrough for receiving the shank and having the concave portion located at the aperture;

wherein the receiver further comprises a channel
5 therethrough opposite the aperture, the channel receiving the elongate member.

10 7. A pedicle screw according to claim 6 and further comprising a compression member between the elongate member and the head; the head having a second convex portion facing the compression member and the compression member having a
15 second concave portion facing the head, the second concave portion having a radius of curvature less than a radius of curvature of the second convex portion whereby to create an interference fit between the head and the pressure member.

8. A pedicle screw according to claim 1 wherein the radius of curvature of the concave portion is about 0.05 mm smaller than the radius of curvature of the convex portion.